Plaintiffs' Exhibit 40

SELL-SIDE PRICING STRATEGY REVIEW

July 11, 2018

Executive summary

Core DVAA seeks access to ad inventory from third-party partners in order to attract advertiser spend. We also seek to improve monetization for creators in order to support a robust content ecosystem (text, app, video) and support Google's overall mission via Search, Android, YouTube, etc. For convenience, in this paper we use the word "publisher" to refer to all types of partners we work with to sell ads -- app developers, video broadcasters, and commerce, as well as news and other text content.

One major goal for DVAA heading into 2019 is to improve our net profitability. There are many ways to achieve this across our business by addressing gross revenue, TAC, net revenue, costs, etc.; media vs platform fees; and buyside vs sellside. There are multiple potentially valid starting points for change, each with complex ecosystem effects.

This paper deliberately limits its scope to presenting options for improving our net revenue from a strictly sell-side perspective -- how to improve the net revenue margin of our media business, and how to grow our net-revenue platform fees. In particular, this paper does not address options for growing total queries or managing costs. This paper focuses primarily on the pricing of DRX and DBM/AwBid via 3PE, but the implications for our network products (AdMob, AFC, Yavin) are noted where applicable.

We contract for access to publisher inventory in three ways, each of which has a different net revenue margin including buy & sell-side prices and different sub-products such as PA, EB, or AwBid vs DBM: 29-39% as an ad network (AFC, AdMob, Yavin/Demand Product); 27% as an ad server (DRX); and 9% via ad exchanges (DBM & AwBid combined margin via 3PE). Overall net revenue margin was 26% in Q1'18, slightly up from 2017 but down 2 ppts from Q1'16. In addition, we earn about $250mm net revenue per year in DFP platform fees. In general, this pricing structure has not been updated in many years.

We believe there is potential for as much as **$300 million per year by 2021** through three strategies. First, we should **stop disclosing margin on GDN (and DBM open auction if possible)**. Second, we should **stop buying through middlemen, who generally add little value to our transactions with publishers and prevent us from maximizing the value of those relationships.** Third, we should **revise our platform fee structure** to charge more for where we are providing more value, and target an overall increase in platform fees (versus the past decade where we were broadly willing to trade off platform fees for inventory access).

Legal and reputational considerations [PRIVILEGED- REFLECTS OC GUIDANCE]

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Sell-side value varies by the differentiation of demand

At our recent sell-side PM offsite, we agreed that publishers' top two value drivers when choosing sell-side products are **revenue performance** (the RPM they can earn from the product, including optimizations and insights that contribute to revenue growth) and **interoperability** (the ability to connect to all possible demand sources including effective direct sales, since that leads to the highest overall revenue performance). The value Google delivers as a *sell-side product*, and thus our ability to charge publishers, is therefore heavily determined by how differentiated the incoming demand is, compared to the demand available through other sell-side products (networks or platforms).

GDN demand via our sell-side products has the highest value to publishers, because they treat networks like GDN as new revenue that they could not get on their own (with the exception of AwBid (3.5% of GDN gross revenue) and deals like Unity ($80mm ARR) and the Network Partner program (X% of GDN revenue)). AFC and AdMob have not historically faced price pressure on their 32% revenue share, though in the Rewarded Video segment, Ironsource has begun offering upfront bounties and higher revenue shares, and FAN, while generally comparable, has been rumored to have done very favorable deals for targeted large partners. Criteo's net revenue margin in Q1 2018 was even higher, at 42.6%. It is worth noting that GDN growth has been slower compared to DBM, in part due to sales resourcing.

DBM auction demand (not PG/PD) via our sell-side products has lower value to publishers than GDN, because the large majority of DBM demand is generally available through any ad exchange. DBM is the largest display buyer on other exchanges (20-30% of their booked revenue), and in the top 2 or 3 of video and app exchanges. It is also worth noting that 60% of DBM's revenue comes from the big 5 agencies who are generally using multiple DSPs at the same time, so DBM's demand is not even necessarily unique to DBM. There are pockets of incremental DBM revenue for publishers on our sell-side, such as the ICM data co-op and shared cookie space on the Web. However, it is also possible to generate higher revenue from DBM on other exchanges, due to the publisher getting better sell-side pricing, or through different yield techniques such as a first-price auction, or calling DBM many times for the same query by using multiple exchanges at once, often with different floors (and frequently with AdX at the top). While

we have made some progress against multi-calls and other 'dirty' auction behavior (including the Poirot project), this is not foolproof, in part because it is hard to detect, and also because publishers frequently set a higher floor for AdX, DBM frequently gets a better deal for advertisers by buying through other exchanges.

AdX buyers, Exchange Bidding/Network Bidding (Jedi), Programmatic Deals (PG/PD) with advertisers & agencies, and tag-based demand (direct deals, header bidding, etc) all represent demand that is generally available through any exchange, mApp mediation stack, or ad server, which makes the relative value of our platform much lower to a publisher. Our best value comes from provable revenue lift thanks to ad quality optimizations and insights -- we estimate that our work here is cumulatively at least a 11%-15% lift over a vanilla system. Unfortunately, we also have drag that means we deliver less revenue -- our revshare (20%) is much higher than other exchanges (generally 10%), and our stricter policies, creative filtering, and bid throttling mean that we actually get less of this demand than others, and we have been steadily losing share of spend from fast-growing AdX buyers like The Trade Desk. Publishers do express concern around delivering a good consumer experience of advertising, but this has unfortunately not dissuaded publishers from working with lower-quality exchanges. **Platform features** can also be compelling sell-side value drivers, more in-line with traditional enterprise software -- technical interoperability, dependability, ease of use, support, development velocity / innovation, and so forth.

1. Pay publishers without disclosing margin

As discussed above, our ad network revenue share is generally considered fair value by publishers, due to the demand we are able to bring, and pricing that is already competitive with (or lower than) network competitors. However, other networks have a key pricing advantage -- they do not disclose their sell-side net margin. This allows them to capture more margin when they provide more value, or to lower margin to win strategic queries, with more flexibility than we can.

Our network products are mostly similar. AdMob and Yavin are equal to other networks, as there is no contractual or public disclosure of our sell-side net margin. Our internal target is 32% but we could easily change it to rebalance margin vs. win rate. AFC disclosed 32% in a 2010 blog post and a live help center article (see Appendix B), which has created a partner expectation that we will notify them if we change it. Note that for both AdMob and AFC, DBM and AdX buyers are under the same margin, so our net margin for DBM here is actually closer to 40% (the sell-side margin *plus* the DBM platform fee).

DRX is more problematic because its contracts specify a Programmatic Revenue Share for the Open Auction, usually 80% (see Appendix B). GDN takes another 15% of margin on the buy-side, but the DRX contract does not make this clear, and we believe that most publishers assume it means they get 80c of every dollar spent on AdWords -- for example, around 20 of our largest partners have negotiated more favorable revenue shares. There is a logical defense for some difference, since AdWords charges CPC/CPA to buyers but pays DRX publishers CPM. But the lack of clarity is a significant reputation risk, because we have publicly stated that AdX does not charge any hidden buy-side fees. In fact, we are already in a risk mode, because Global Bernanke means that some partners have a higher rate and some a lower rate, with 15% becoming just the average target across publishers.

We should resolve this lack of clarity, because simply increasing the GDN margin could generate meaningful net revenue improvements, based on an experiment with Web inventory. Options include:

1. Go ahead and change GDN buy-side margin on DRX with no sell-side communications. Fastest time to revenue, no mitigation to the reputation risk. [illegible] if WE do This [illegible] [illegible] Bernanke?

2. Approve sell-side communications to clarify that GDN takes a non-disclosed additional margin. Fast time to revenue, somewhat mitigates reputation risk.
3. Convert GDN buying for all inventory on DRX to the same network model as AdMob and competitors, where we do not disclose revenue share. Requires recontracting, risk of backlash if we are perceived as trying to take more revenue away from struggling publishers.
4. Convert GDN buying mApp, Video, and other new/emerging inventory on DRX to the same network model as AdMob and competitors. Requires recontracting, but aligns our fastest-growing businesses and is defensible as consistent with competitors' behavior.
5. Accelerate the New Network by offering publishers increased network revenues through access to Google data, but without disclosing revenue share. Longest time to increased revenue since it depends on delivering material lift through GKS/GAIA, but as anonymous identifiers go away, this would become our primary network anyway.

DRX's 20% rate is problematic for DBM and AdX buyers as well, because as discussed, it is significantly higher than the competition. The sell-side cannot easily lower this rate, because DBM's profitability depends on it. It would be ideal for DBM to increase its fees to buyers, allowing DRX to lower its revenue share to match the market, but that is out of scope of this paper. A potentially viable sell-side-only change would be to offer DBM and GDN together, so that publishers would start to perceive DBM open auction demand as part of the Google network. This would give us room to vary the sell-side margin for DBM -- upward based on value (such as ICM), but also downward in order to win a DBM query on DRX versus another exchange (because winning on DRX with a 5% sell-side margin is still better than winning on another exchange with 0% sell-side margin). However, repackaging DBM and GDN on DRX would require recontracting, so options 3, 4, and 5 above.

2. Pay media revenue directly to partners, not middlemen

Today, 15% of Core DVAA gross revenue (without fees) and 6% of net revenue comes via inventory access deals with exchanges and other middlemen. We pay most/all of our booked revenue to the middleman, and they pay a portion (minus their own margin) on to the actual publisher. DBM has historically not taken any additional margin through these deals; AwBid's target margin is 15%. The middleman's margin with the publisher is not transparent to us, and we do not have control over how our payments to the publisher are represented in the middleman's reporting system.

This model made sense for the old Web world, because there were large tranches of valuable inventory not otherwise available. Publishers used only one exchange at a time, we had no scaled sell-side product for publishers not using DFP, and Google was a small buyer on the marketplace overall. But the world has changed. Most Web publishers now use multiple exchanges at a time, so much so that ~78% of DBM spending on third-party exchanges is on publishers with whom we also have a DRX relationship. DBM is such a valuable partner now that it is effectively subsidizing the third-party exchange ecosystem -- for example, 30% of Exchange Bidding gross revenue is actually coming from DBM. And, we now have a viable strategy to buy directly from partners not on our platform -- via AdMob booked into someone else's mediation stack, or into bidded environments via Yavin as that product comes to market.

REQUIRED!

We strongly recommend that we **end the practice of paying our booked revenue to middlemen for mApp, video, and other new platforms** (audio, DOOH, AR/VR, etc). In DBM today, 60% of App spend lands on our inventory (DRX/AdMob), and the team has a target to accelerate that to 90%. However, we could move even more aggressively to ramp up Yavin (bidded) or AdMob (via mediation) as our lead products for off-platform inventory, so we always contract directly with and pay media to the end publisher, with a sell-side margin that we negotiate. We would continue to work through other ad technology (like AdMob in mediation, or if Yavin bid into another exchange), but only as tech vendors, not as a financial

party to the primary media transaction. This does not require any extra disclosures in DBM, as we have already determined that DBM can buy Yavin (and AFC and AdMob) inventory where Google takes sell-side margin. However we might need to disclose this change to maintain buyer trust.

AdMob is already at scale in this market ($5.7B via mediation), but for Yavin to play its role in bidded environments (another $2-3B opportunity in Apps alone), we will need to substantially accelerate Yavin development and shift sell-side sales to signing inventory deals; this should start as soon as possible and will significantly change our 2019 priorities.

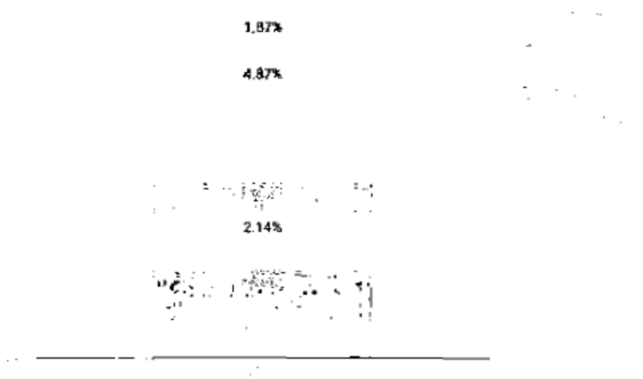
The Web is less promising, because the old model is deeply entrenched. There may be some targeted opportunities to change to a direct model, such as doing a deal directly with Microsoft instead of paying them via AppNexus. Instead, we recommend changes to our products to **make a direct relationship with Google more financially attractive to publishers than calling DBM & AwBid through multiple exchanges**. Options include:

1. Give up last look in DRX, so that other exchanges' prices from header bidding can't set a floor in our auction. This will somewhat reduce publisher revenues, but aligns header bidding and exchange bidding behavior.
2. Convert DRX to a first-price auction, so that floor prices only affect who wins, not the price that the winner pays. Other exchanges have already made this change. This would require disclosure and possibly contract changes.
3. Continued efforts to detect & prevent multiple calls, but recognizing that this will not be 100% effective.
4. Create our own multiple-call/soft-floor features, so we can extract as much yield from DBM & AwBid as publishers make by calling via multiple exchanges. Note that most of the mobile app business already allows multi-call, and AdMob already has a multi-call feature ready to go but it was tabled previously out of concern for keeping DRX and AdMob consistent.

3. Grow platform revenues

Platform revenues have not been a priority in ten years. Independent DoubleClick doubled DFP platform fees from 2004 to 2007, but with the Google acquisition focus shifted to media businesses with higher gross revenue. The platform was deemed to have strategic value in giving Google the opportunity to compete for publisher inventory. Quantitative studies in 2008 determined that moving a publisher from AFC to DFP Small Business (called Google Ad Manager at the time) resulted in ~10% more queries won by our network, but no change in RPM. Anecdotally, moving an app onto AdMob mediation appears to have similar lift. Because of this focus, core platform revenues (ex-Video) have grown at ~4.3% CAGR to $220mm in 2017, even as queries growing at X% CAGR to Y. This discrepancy appears to be accelerating, with average platform rates dropping 22% in the past two years to ~1.6 cents.

With a focus on net revenue and ultimately profit, platform fees are relevant again. Even a modest 10-20% improvement in platform fees could have substantial positive impact on our overall profitability. We believe that the market will bear a price increase that reflects fair value and remains competitive. Publishers have proven that they are willing to pay more for ad tech that helps them achieve goals -- data warehousing, yield/insight, measurement companies, data assets, etc. Many larger publishers have also invested to build or buy their own ad tech, including Pandora, Spotify, eBay, Hearst, Cox, and many others. Just as video ad serving is priced higher than Web, we believe that support for emerging platforms like audio, DOOH, etc should be able to command higher ad serving fees. And the continuing shift toward consumer payments (subscriptions, IAP, commerce) means additional opportunities for Google to create and capture value.



To measure the platform fee opportunity accurately, we should **treat the net revenue of PG/PD, EB, and AdX buyers all as part of platform fees** alongside core & video platform fees, and not media businesses. These are all fundamentally platform features that help publishers manage their own relationships with generally-available demand. By this definition, all-in platform net revenue growth was +13.9% in 2017 (up from +12.4% in 2016), with PG/PD the largest contributor to net revenue growth (see chart). This data confirms the continuing value of our current strategies to convert tag-based queries to programmatic, which represents ¾ of our net revenue growth in 2017. Ideally, increases in tag-based platform fees could achieve a dual goal of improving net revenue from tags while also making our programmatic options more attractive. We recommend four actions:

1. **Deprecate DFP Small Business.** SB is a self-service product that is free up to 90 million queries and 0.5c above that, and now represents X% of total DRX queries. It was originally designed to be a simplified product to help mid-size and emerging-market partners who had free alternatives, but the product is now mostly the same as Premium, and there are no other free ad servers in the market. Free-tier SB partners should be moved to our network business model with non-disclosed margin and limited controls (and moved to AFC or AdMob where appropriate). SB Paid rates should be brought in-line with Premium, with a special rate card for emerging markets.

2. **Increase the rate card for non-video tag-based queries by 10% or more**, within the bounds of market acceptance and pending legal review. There are differences of opinion on what is feasible here. It is possible that partners would accept as much as a 2x increase in tag-based fees, if it was coupled with a lower AdX buyer revshare (see #4 below). Too much of an increase, however, would backfire by incentivizing publishers to avoid calling DRX entirely when another demand source can pay enough. At a minimum, we should stop approving any further discounts from current negotiated rates. Publishers have currently been trained to expect lower fees on every contract renewal, which should end.

3. **Introduce new fees based where the platform delivers additional value**, specifically for complex header-bidding setups, and for tag-based reservations. Header bidding puts extra load on DRX by creating tens of thousands of new line items for decisioning and reporting purposes. We should introduce a line item fee to capture the value we're providing and discourage irresponsible setups. Supporting tag-based reservations represent a large part of our platform costs in forecasting, scheduling/pacing, and support. Due to the CPM declines, for a typical $10 reservation CPM, our value capture has declined from ~0.5-1% in 2008 to less than 0.2% in 2017. We should differentiate our rates to charge a higher CPM for reservation line items than remnant.

4. **Lower the AdX buyer revshare**, either across the board, or by allowing AdX buyers to move to Network Bidding terms (10% sellside margin). As stated repeatedly, we are losing share of these buyers's spend to other exchanges, due in large part to our above-market rates. Lowering this margin to 10% would cost ~$103mm in annual net revenue, so its effectiveness would depend on the second-order effect of winning more spend back from other exchanges to DRX. Market testing would answer this.

Financial estimate

Finance did a set of sensitivity analyses for how to improve net revenue by $100mm. Three of those estimates that drive our rough projection of +$300mm net revenue per year within three years. While the details of each implementation may not be exactly as finance estimated, we are comfortable that the projects proposed in this paper will directionally achieve results on these magnitudes.

1. If **stop disclosing margin** allows us to improve overall AdX sell-side margin 1.8ppt:

	Current TAC %	+$100M TAC %	Variance
Total	84%	82%	-2ppt

2. If **pay media revenue directly to partners** allows us to move 40% of DBM on 3PE inventory to DRX:

Inventory Source	Current Mix %	+$100M Mix %	Variance
AdX	51%	67%	16ppt
3PE NonGoogle	40%	24%	-16ppt
AFC	7%	7%	0ppt
Demand Product	2%	2%	0ppt
Total	100%	100%	0ppt

3. If **grow platform revenues** allows us to move DFP Small Biz customers to DFP Premium and increase rates 20%:

2017		
Share of Total	7%	93%
CPM	$0.0053	$0.0173
Impressions (B)	3,364	14,19
Revenue ($M)	$19	$250

2017			
% Share of DFP Small Business	7%	0%	-7ppt
% Share of DFP Premium	93%	100%	7ppt
Avg. CPM	$0.015	$0.018	20%

APPENDIX A - SELL-SIDE PRICING IN DETAIL

All told, we have a complex set of products in the market, with a wide range of prices with inconsistent bundling, transparency, and policies:

Demand source	Value to partner	Sellside margin	Pub price elsewhere
GDN	New revenue -- unique demand that is unavailable elsewhere (except for AwBid)	~32% (20%, plus 15% undeclared buyside margin, which we believe publishers are not aware of)	~24% -- AwBid target is ~15%, other exchanges are 10%
DBM	Incremental revenue -- demand is generally available; RPMs only better on AdX sometimes (see below)	20% (DRX); 32% (AdMob & AFC)	~10%
AdX buyers	Platform features (demand is generally available) -- integration & protections	20% (DRX); 32% (AdMob & AFC)	~10%, higher RPMs since other exchanges have fewer restrictions
3P Exchanges and Networks in Jedi (EB/NB)	Platform features -- Integration, latency, payments, yield management	5% (Web), 10% (mApp and video)	2c (header bidding), 1c when matched (Amazon transparent ad marketplace)
Networks and exchanges via tag/mediation	Platform features -- single stack, yield management	2c (DRX); free (AdMob & DFP SB)	~1c? (AppNexus); free (MoPub)
Programmatic deals (PG, PD)	Platform features -- integration, efficiency, payments	5-10%	5-15% (PMPs on other exchanges, implemented via header bidding or EB)
Tag-based deals with advertisers	Platform features -- workflow, on-schedule delivery, reporting	2c (DRX); free (DFP SB)	~1c (AppNexus)
Reporting, forecasting, insights	Platform features -- more efficient use of inventory, revenue-generating insights	Hard-bundled	Hard-bundled, or $50k+ for add-on products (YieldEx, Adomik, etc)

APPENDIX B - net margin disclosure language

AdSense blog post (2010): "Since launching AdSense for content in 2003, this revenue share has never changed... The AdSense for search revenue share has remained the same since 2005, when we increased it... Of course, we can't guarantee that the revenue share will never change (our costs may change significantly, for example), but we don't have any current plans to do so for any AdSense product. Over the next few months we'll begin showing the revenue shares for AdSense for content and AdSense for search right in the AdSense interface.

AdSense help center article (live since 2010): "For displaying ads with AdSense for content, publishers receive 68% of the revenue recognized by Google in connection with the service. For AdSense for search, publishers receive 51% of the revenue recognized by Google. These percentages are consistent, regardless of a publisher's geographic location, and are not in any way averaged between publishers. We

don't disclose the revenue share for other AdSense products; the revenue share varies for other products due to different costs of developing and supporting these products."

DRX contract terms (from [illegible] and [illegible]):

"1. DFP and AdX Services.
b. Programmatic Revenue Share Percentages.
i. Open Auction - 80% of Net Ad Revenues
ii. Private Auction - 80% of Net Ad Revenues

"Net Ad Revenues" means, for each of the Services, for any period during the Term, Ad Revenues for that period minus the Ad Deduction (if any) for that period.

"Ad Revenues" means, for any period during the Term, for each Programmatic transaction type, the sum of the Programmatic Transaction Prices in that period.

"Programmatic Transaction Price" means, in a Programmatic transaction, the final price for the provision of the Ad.

"Ad Deduction" means, for each of the Services, for any period during the Term, the Deduction Percentage (as listed and defined in the user interface or in the Order Forms) of Ad Revenues.

There is no separate definition of "Deduction Percentage."